Fact Sheet Summary - Duane Marine site

The Duane Marine site is located at 26 Washington Street, Perth Amboy, New Jersey. The site lies at the end of Washington Street, near the intersection of Front and Washington Streets along the Arthur Kill river. The geographic coordinates of the site are 40° 30' 47" N latitude and 74° 15' 38" W longitude. The site is approximately 7 acres, occupying Lots 5, 5R, 6, and 6R of Block 238. Lots 5R and 6R are riparian grants. The property was sold in 1998. The site and surrounding area are currently being considered by the City of Perth Amboy for a large waterfront park project in an ongoing urban renewal initiative.

In 1975, Duane Marine began operation as a waste oil collection, blending, and recycling company. In 1978, operations were expanded to include hazardous waste collection, processing, storage, transportation, and waste disposal. Duane Marine operated a hazardous waste storage and treatment facility between 1975 and 1980. Storage vessels known to have been on site include: 6 tank trailers, 13 small tanks, 5 medium-sized vats or tanks, 1 large storage tank (250,000-gallon capacity), 8 roll- off containers and dumpsters, and 3 fuel USTs. In addition, 2,260 55-gallon drums were noted to have been on site. Soil, sediment, and waste sampling results from several sampling events previously conducted at the site indicate the presence of volatile organic compounds (VOC), semivolatile organic compounds (SVOC), metals, and polychlorinated biphenyls (PCB).

Duane Marine was cited on numerous occasions for poor housekeeping practices and failure to file and implement a Spill Prevention Control and Countermeasures (SPCC) Plan. In May 1979, the City of Perth Amboy brought suit against Duane Marine, seeking to have operations at the facility ceased. The company's operating authorization from New Jersey Department of Environmental Protection (NJDEP) had expired in April 1979. In July 1979, Duane Marine entered into a consent order with NJDEP, which permitted Duane Marine to continue operating provided action was taken to improve waste handling practices. Duane Marine failed to comply with the consent order despite numerous attempts by NJDEP to enforce the terms and conditions.

On 7 July 1980, a fire destroyed the Duane Marine facility, which at the time contained hazardous wastes stored in tanks, drums, roll-off containers, and truck trailers. On 18 July 1980, Duane Marine expressed in court that it had no interest in continuing operations as a special waste facility on the Perth Amboy premises. The court ordered Duane Marine to undertake immediate cleanup activities at the site. Duane Marine abandoned the site and failed to comply with the court order.

NJDEP responded several times to the Duane Marine site and noted liquids leaking from some of the containers on site. On 12 July 1984, several oil discharge points were observed by State and Federal environmental agencies to be flowing directly into the Arthur Kill from the edge of the facility. Sampling and analysis of the oil identified the presence of PCBs. In July 1984, a trenching operation revealed oil floating on the water table and the presence of buried crushed drums.

After continuous failure by Duane Marine to begin property cleanup, the Duane Marine Steering

Committee (DMSC), a group composed of potentially responsible parties, decided to comply with an administrative order issued by EPA on 5 March 1985. A cleanup of the facility commenced, and continued until the spring of 1987. Actions undertaken by the DMSC included the removal and proper off-site disposal of hazardous materials from storage containers and buildings. Visibly stained soils were also excavated and disposed of in EPA-approved facilities. No post-cleanup analytical data are available.

The Region II Field Investigation Team (FIT) prepared a Site Inspection Report for the Duane Marine site in September 1989. During an off-site reconnaissance, FIT observed that two roll-off dumpsters and the 250,000-gallon tank still existed on site. They also noted that access to the site could be gained through missing boards on doors and a wide gap in the gate. Monitoring wells were installed by the DMSC in the spring of 1991.

On 10 May 2000, the Region II Superfund Technical Assistance and Response Team (START) conducted an on-site reconnaissance of the Duane Marine facility. Abandoned tank trucks and tanks were observed to be serving as shelter to homeless persons. People enter the property through breaks in the fence to access the Arthur Kill for fishing and recreation. There are two buildings on the site, a three-story structure and an attached one-story structure, both gutted from the fire of 1980. The site is currently abandoned.

Roy F. Weston, Inc. (WESTON) conducted Site Inspection Prioritization (SIP) sampling at the site in May 2001. Surface soil and sediment samples were collected and screened for PCBs with immunoassay kits. Based on the field screening results, WESTON collected soil and sediment samples for CLP laboratory analysis in those areas where the impact of site activities appears to be greatest and at background locations. Surface soil samples were collected at seven on-site locations, and two background samples were collected at off-site locations. Sediment samples were collected from the shoreline at four locations adjacent to the site and two locations upstream, and from lateral transects into the Arthur Kill originating at each shoreline sample location. WESTON also collected groundwater samples from on-site monitoring wells MW-5, MW-6, MW-7, and MW-8.

The analytical results indicate that PCBs are present in on-site soils at concentrations ranging from 1,400 to 200,000 micrograms per kilogram (μg/kg). PCBs were not detected in either off-site background soil samples. Several VOCs, SVOCs, and metals were also detected significantly above background in on-site soils.

In the sediments collected from the transects of the Arthur Kill adjacent to the site, PCBs were detected at concentrations ranging from 1,000 μg/kg to 25,900 μg/kg. Background PCB concentrations in upstream sediment samples ranged from 163 μg/kg to 1,010 μg/kg. The PCB concentrations at 15 of 16 sediment sample locations on transects adjacent to the site exceeded the maximum background concentrations, and the concentrations were at least three times greater than background at 10 of the 16 locations.

The Arthur Kill in the immediate vicinity of the site is a fishery. During the sampling event and previous site visits, WESTON observed several people fishing from the properties immediately

marine sediments trigger medium impact .8

upstream of the site. Upon questioning, one man said that he fishes at the location frequently. He catches striped bass, bluefish, and other species for consumption. WESTON observed another man catch a striped bass on May 10, 2001. When asked, he said he would eat the fish. Sandy Hook, located 11 miles downstream of the site, is a Natural Heritage Priority Site.